### STIC Biotechnology Systems Branch

# RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:	<u>/o/\$87,389</u>
Source:	IFWP
Date Processed by STIC:	8/9/06
-	-101-

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 4.4.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<a href="http://www.uspto.gov/ebc/efs/downloads/documents.htm">http://www.uspto.gov/ebc/efs/downloads/documents.htm</a>, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
   U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street,
   Alexandria, VA 22314

Revised 01/10/06

#### Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 10/587, 389
ATTN: NEW RULES CASES:	PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
lWrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 5 <sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s)contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:  (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  This sequence is intentionally skipped  Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing.  Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10Invalid <213> Response	Per 1.823 of Sequence Rules, the only <b>valid</b> <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is <b>required</b> when <213> response is Unknown or is Artificial Sequence. (see item 11 below)
11Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of Sequence Rules
12PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13 Misuse of n/Xaa	"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



**IFWP** 

RAW SEQUENCE LISTING DATE: 08/09/2006 PATENT APPLICATION: US/10/587,389 TIME: 10:06:36

Input Set : N:\SSLM\10587389.txt

Output Set: N:\CRF4\08092006\J587389.raw

see item 4 on Even Summary Sheet accine carriers see yr. 2,4-6,912,14,15; see yr. 2,4-6,912,14,15; 4 <110> APPLICANT: Stefano Colloca Alfredo Nicosio 5 Elisabetta Sproreno 6 7 Agostino Cirillo Bruno Bruni Ercole Annalisa Meola 11 <120> TITLE OF INVENTION: CHIMPANZEE ADENOVIRUS VACCINE CARRIERS 14 <130> FILE REFERENCE: ITRO048YP C--> 16 <140> CURRENT APPLICATION NUMBER: US/10/587,389 C--> 16 <141> CURRENT FILING DATE: 2006-07-25 16 <150> PRIOR APPLICATION NUMBER: 60/538,799 17 <151> PRIOR FILING DATE: 2004-01-23 19 <150> PRIOR APPLICATION NUMBER: PCT/EP2005/000558 Does Not Comply 20 <151> PRIOR FILING DATE: 2004-01-18 Corrected Diskette Needed 22 <160> NUMBER OF SEQ ID NOS: 125 24 <170> SOFTWARE: FastSEQ for Windows Version 4.0

#### ERRORED SEQUENCES

1294 <210> SEQ ID NO: 3 1295 <211> LENGTH: 36606 1296 <212> TYPE: DNA 1297 <213> ORGANISM: Chimpanzee Pan 6 (CV32) Genomic 1299 <400> SEQUENCE: 3 1300 catcatcaat aatatacctc aaacttttgg tgcgcgttaa tatgcaaatg agctgtttga 60 1302 tgacgttttg atgacgtggc tatgaggcgg agccggtttg caagttctcg tgggaaaagt 180 1303 gacgtcaaac gaggtgtggt ttgaacacgg aaatactcaa ttttcccgcg ctctctgaca 240 1304 ggaaatgagg tgtttctggg cggatqcaag tgaaaacggg ccattttcgc gcgaaaactg 300 1305 aatgaggaag tgaaaatctg agtaatttcg cgtttatggc agggaggagt atttgccgag 360 1306 ggccgagtag actttgaccg attacgtggg ggtttcgatt accgtatttt tcacctaaat 420 1307 ttccgcgtac ggtgtcaaag tccggtgttt ttacgtaggc gtcagctgat cgccagggta 480 1308 tttaaacctg cgctctctag tcaagaggcc actcttgagt gccagcgagt agagttttct 540 1309 cctccgcgcc gcgagtcaga tctacacttt gaaagatgag gcacctgaga gacctgcccg 600 1310 gtaatgtttt cctggctact gggaacgaga ttctggaatt ggtggtggac gccatgatgg 660 1311 gtgacgaccc tccagagccc cctaccccat ttgaggcgcc ttcgctgtac gatttgtatg 720 1312 atctggaggt ggatgtgccc gagagcgacc ctaacgagga ggcggtgaat gatttgttta 780 1313 gcgatgccgc gctgctggct gccgagcagg ctaatacgga ctctggctca gacagcgatt 840 1314 ceteteteca tacceegaga eeeggeagag gtgagaaaaa gateeeegag ettaaagggg 900 1315 aagagetega cetgegetge tatqaggaat gettgeetee gagegatgat gaggaggaeg 960 1316 aggaggcgat tcgagctgcg gtgaaccagg gagtgaaaac tgcgggcgag agctttagcc 1020 1317 tggactgtcc tactctgccc ggacacggct gtaagtcttg tgaatttcat cgcatgaata 1080

DATE: 08/09/2006 RAW SEQUENCE LISTING TIME: 10:06:36 PATENT APPLICATION: US/10/587,389

Input Set : N:\SSLM\10587389.txt

Output Set: N:\CRF4\08092006\J587389.raw

```
1318 ctggagataa gaatgtgatg tgtgccctgt gctatatgag agcttacaac cattgtgttt 1140
    1319 acagtaagtg tgattaactt tagttgggaa ggcagagggt gactgggtgc tgactggttt 1200
    1320 atttatqtat atgttttttt atgtgtaggt cccgtctctg acgtagatga gacccccact 1260
    1321 tcagagtgca tttcatcacc cccagaaatt ggcgaggaac cgcccgaaga tattattcat 1320
    1322 agaccagttg cagtgagagt caccgggcgg agagcagctg tggagagttt ggatgacttg 1380
    1323 ctacagggtg gggatgaacc tttggacttg tgtacccgga aacgccccag gcactaagtg 1440
    1324 ccacacatgt gtgtttactt aaggtgatgt cagtatttat agggtgtgga gtgcaataaa 1500
    1325 atccgtgttg actttaagtg cgtgttttat gactcagggg tggggactgt gggtatataa 1560
    1326 gcaggtgcag acctgtgtgg tcagttcaga gcaggactca tggagatctg gactgtcttg 1620
    1327 gaagactttc accagactag acagttgcta gagaactcat cggagggagt ctcttacctg 1680
    1328 tggagattct gcttcggtgg gcctctagct aagctagtct atagggccaa acaggattat 1740
    1329 aaggaacaat ttgaggatat tttgagagag tgtcctggta tttttgactc tctcaacttg 1800
    1330 ggccatcagt ctcactttaa ccagagtatt ctgagagccc ttgacttttc tactcctggc 1860
    1331 agaactaccg ccgcggtagc cttttttgcc tttattcttg acaaatggag tcaagaaacc 1920
    1332 catttcagca gggattaccg tctggactgc ttagcagtag ctttgtggag aacatggagg 1980
    1333 tgccagcgcc tgaatgcaat ctccggctac ttgccagtac agccggtaga cacgctgagg 2040
    1334 atcetgagte tecagteace ecaggaacae caaegeegee ageageegea geaggageag 2100
    1335 cagcaagagg aggaccgaga agagaacccg agagccggtc tggaccctcc ggtggcggag 2160
    1336 gaggaggagt agctgacttg tttcccgagc tgcgccgggt gctgactagg tcttccagtg 2220
    1338 ctgtcagtct gatgagccgc aggcgcccag aatcggtgtg gtggcatgag gtgcagtcgc 2340
    1339 aggggataga tgaggtctcg gtgatgcatg agaaatattc cctagaacaa gtcaagactt 2400
    1340 qttqqttqqa qcccqaqqat qattqqqaqq taqccatcaq gaattatgcc aagctggctc 2460
    1341 tgaagccaga caagaagtac aagattacca aactgattaa tatcagaaat tcctgctaca 2520
    1342 tttcagggaa tggggccgag gtggagatca gtacccagga gagggtggcc ttcagatgtt 2580
    1343 gtatgatgaa tatgtacccg ggggtggtgg gcatggaggg agtcaccttt atgaacacga 2640
    1344 ggttcagggg tgatgggtat aatggggtgg tctttatggc caacaccaag ctgacagtgc 2700
    1345 acggatgete ettetttgge tteaataaca tgtgeatega ggeetgggge agtgttteag 2760
    1346 tgaggggatg cagcttttca gccaactgga tgggggtcgt gggcagaacc aagagcaagg 2820
    1347 tgtcagtgaa gaaatgcctg ttcgagaggt gccacctggg ggtgatgagc gagggcgaag 2880
    1348 ccaaagtcaa acactgcgcc tctaccgaga cgggctgctt tgtgctgatc aagggcaatg 2940
    1349 cccaagtcaa gcataacatg atctgtgggg cctcggatga gcgcggctac cagatgctga 3000
    1350 cctgcgccgg tgggaacagc catatgctgg ccaccgtgca tgtggcctcg caccccgca 3060
    1351 agacatggcc cgagttcgag cacaacgtca tgacccgctg caatgtgcac ctgggctccc 3120
    1352 gccgaggcat gttcatgccc taccagtgca acatgcaatt tgtgaaggtg ctgctggagc 3180
    1353 ccgatgccat gtccagagtg agcctgacgg gggtgtttga catgaatgtg gagctgtgga 3240
    1354 aaattctgag atatgatgaa tccaagacca ggtgccgggc ctgcgaatgc ggaggcaagc 3300
    1355 acgccaggct tcagcccgtg tgtgtggagg tgacggagga cctgcgaccc gatcatttgg 3360
    1356 tgttgtcctg caacgggacg gagttcggct ccagcgggga agaatctgac tagagtgagt 3420
    E--> 1359 atotgacggg gogtotocco tootgggogg gagtgtgtoa gaatgttatg galatocacgg 3600
    1365 cggttgccac ggtgaaaacc aaataaaaaa tgaatcaata aataaacgga gacggttgtt 3960
```

1366 gattttaaca cagagtettg aatetttatt tgattttteg egegeggtag geeetggace 4020

Input Set : N:\SSLM\10587389.txt

```
1367 accggtctcg atcattgagc acccggtgga tcttttccag gacccggtag aggtgggctt 4080
1368 ggatgttgag gtacatgggc atgagcccgt cccgggggtg gaggtagctc cattgcaggg 4140
1369 cctcgtgctc ggggatggtg ttgtaaatca cccagtcata gcaggggcgc agggcgtggt 4200
1370 gctgcacgat gtccttgagg aggagactga tggccacggg cagccccttg gtgtaggtgt 4260
1371 tgacgaacct gttgagctgg gagggatgca tgcgggggga gatgagatgc atcttggcct 4320
1372 ggatcttgag attggcgatg ttcccgccca gatcccgccg ggggttcatg ttgtgcagga 4380
1374 cgtgaaagaa tttggagacg cccttgtgac cgcccaggtt ttccatgcac tcatccatga 4500
1375 tgatggcgat gggccgtgg gcggcgcct gggcaaagac gtttcggggg tcggacacat 4560
1376 cgtagttgtg gtcctgggtg agctcgtcat aggccatttt aatgaatttg gggcggaggg 4620
1377 tgcccgactg ggggacgaag gtgccctcga tcccgggggc gtagttgccc tcgcagatct 4680
1378 gcatctccca ggccttgagc tcggagggg ggatcatgtc cacctgcggg gcgatgaaaa 4740
1379 aaacggtttc cggggcgggg gagatgagct gggccgaaag caggttccgg agcagctggg 4800
1380 acttgccgca accggtgggg ccgtagatga ccccgatgac cggctgcagg tggtagttga 4860
1381 gggagagaca gctgccgtcc tcgcggagga ggggggccac ctcgttcatc atctcgcgca 4920
1382 catgcatgtt ctcgcgcacg agttccgcca ggaggcgctc gccccccagc gagaggagct 4980
1383 cttgcagcga ggcgaagttt ttcagcggct tgagtccgtc ggccatgggc attttggaga 5040
1384 gggtctgttg caagagttcc agacggtccc agagctcggt gatgtgctct agggcatctc 5100
1385 gatccagcag acctcctcgt ttcgcgggtt ggggcgactg cgggagtagg gcaccaggcg 5160
1386 atgggcgtcc agcgaggcca gggtccggtc cttccagggc cgcagggtcc gcgtcagcgt 5220
1387 ggtctccgtc acggtgaagg ggtgcgcgcc gggctgggcg cttgcgaggg tgcgcttcag 5280
1388 gctcatccgg ctggtcgaga accgctcccg gtcggcgccc tgcgcgtcgg ccaggtagca 5340
1389 attgagcatg agttegtagt tgagegeete ggeegegtgg eeettggege ggagettace 5400
1390 tttggaagtg tgtccgcaga cgggacagag gagggacttg agggcgtaga gcttgggggc 5460
1391 gaggaagacg gacteggggg egtaggegte egegeegeag etggegeaga eggtetegea 5520
1392 ctccacgagc caggtgaggt cggggcggtt ggggtcaaaa acgaggtttc ctccgtgctt 5580
1393 tttgatgegt ttettacete tggtetecat gagetegtgt eecegetggg tgacaaagag 5640
1394 gctgtccgtg tccccgtaga ccgactttat gggccggtcc tcgagcgggg tgccgcggtc 5700
1395 ctcgtcgtag aggaaccccg cccactccga gacgaaggcc cgggtccagg ccagcacgaa 5760
1396 ggaggccacg tgggagggt agcggtcgtt gtccaccagc gggtccacct tctccagggt 5820
1397 atgcaagcac atgtccccct cgtccacatc caggaaggtg attggcttgt aagtgtaggc 5880
1398 cacgtgaccg ggggtcccgg ccgggggggt ataaaagggg gcgggcccct gctcgtcctc 5940
1399 actgtcttcc ggatcgctgt ccaggagcgc cagctgttgg ggtaggtatt ccctctcgaa 6000
1400 ggcgggcatg acctcggcac tcaggttgtc agtttctaga aacgaggagg atttgatatt 6060
1401 gacggtgccg ttggagacgc ctttcatgag cccctcgtcc atttggtcag aaaagacgat 6120
1402 ctttttgttg tcgagcttgg tggcgaagga gccgtagagg gcgttggaga gcagcttggc 6180
1403 gatggagege atggtetggt tetttteett gteggegege teettggegg egatgttgag 6240
1404 ctgcacgtac tcgcgcgcca cgcacttcca ttcggggaag acggtggtga gctcgtcggg 6300
1405 cacgattetg accegecage egeggttgtg cagggtgatg aggtecaege tggtggceae 6360
1406 ctcgccgcgc aggggctcgt tggtccagca gaggcgcccg cccttgcgcg agcagaaggg 6420
1407 gggcagcggg tccagcatga gctcgtcggg ggggtcggcg tccacggtga agatgccggg 6480
1408 caggageteg gggtegaagt agetgatgea ggtgeeeaga ttgteeageg eegettgeea 6540
1409 gtcgcgcacg gccagcgcgc gctcgtaggg gctgaggggc gtgccccagg gcatggggtg 6600
1410 cgtgagcgcg gaggcgtaca tgccgcagat gtcgtagacg tagaggggct cctcgaggac 6660
1411 gccgatgtag gtggggtagc agcgccccc gcggatgctg gcgcgcacgt agtcgtacag 6720
1412 ctcgtgcgag ggcgcgagga gccccgtgcc gaggttggag cgttgcggct tttcggcgcg 6780
1413 gtagacgatc tggcggaaga tggcgtggga gttggaggag atggtgggcc tttggaagat 6840
1414 gttgaagtgg gcgtggggca ggccgaccga gtccctgatg aagtgggcgt aggagtcctg 6900
1415 cagettggeg acgagetegg eggtgaegag gaegteeagg gegeagtagt egagggtete 6960
```

Input Set : N:\SSLM\10587389.txt

```
1416 ttggatgatg tcatacttga gctggccctt ctgcttccac agctcgcggt tgagaaggaa 7020
     1417 ctcttcgcgg tccttccagt actcttcgag ggggaacccg tcctgatcgg cacggtaaga 7080
     1418 gcccaccatg tagaactggt tgacggcctt gtaggcgcag cagcccttct ccacggggag 7140
     1419 ggcgtaagct tgcgcggcct tgcgcaggga ggtgtgggtg agggcgaagg tgtcgcgcac 7200
     1420 catgacettg aggaactggt gettgaagte gaggtegteg cageegeeet geteecagag 7260
     1421 ttggaagtcc gtgcgcttct tgtaggcggg gttaggcaaa gcgaaagtaa catcgttgaa 7320
     1422 gaggatettg eeegegegg geatgaagtt gegagtgatg eggaaagget ggggeacete 7380
     1423 ggcccggttg ttgatgacct gggcggcgag gacgateteg tcgaagccgt tgatgttgtg 7440
     1424 cccgacgatg tagagttcca cgaatcgcgg gcggcccttg acgtggggca gcttcttgag 7500
     1425 ctcgtcgtag gtgagctcgg cggggtcgct gagcccgtgc tgctcgaggg cccagtcggc 7560
     1426 gacgtggggg ttggcgctga ggaaggaagt ccagagatcc acggccaggg cggtctgcaa 7620
1427 geggtecegg tactgaegga actgregge caeggeeatt tttteggggg tgaegeagta 7680 E--> 1428 gaaggtgegg gggtegeegt geeanggte ceaettgage tggagggega ggtegtggge 7740
     1429 gagetegaeg ageggegggt ceeeggagag ttteatgaee ageatgaagg ggaegagetg 7800
     1430 cttgccgaag gaccccatcc aggtgtaggt ttccacatcg taggtgagga agagcctttc 7860
     1431 ggtgcgagga tgcgagccga tggggaagaa ctggatctcc tgccaccagt tggaggaatg 7920
     1432 gctgttgatg tgatggaagt agaaatgccg acggcgccc gagcactcgt gcttgtgttt 7980
     1433 atacaagcgt ccgcagtgct cgcaacgctg cacgggatgc acgtgctgca cgagctgtac 8040
     1434 ctgggttcct ttggcgagga atttcagtgg gcagtggagc gctggcggct gcatctcgtg 8100
     1435 ctgtactacg tcttggccat cggcgtggcc atcgtctgcc tcgatggtgg tcatgctgac 8160
     1436 gagcccgcgc gggaggcagg tccagacctc ggctcggacg ggtcggagag cgaggacgag 8220
     1437 ggcqcgcaqg ccqqaqctqt ccagggtcct qagacgctgc ggagtcaggt cagtqggcag 8280
     1438 cggcggcgcg cggttgactt gcaggagctt ttccagggcg cgcgggaggt ccagatggta 8340
     1439 cttgatctcc acggcgccgt tggtggctac gtccacggct tgcagggtgc cgtgcccctg 8400
     1440 gggcgccacc accgtgcccc gtttcttctt gggcgctgct tccatgtcgg tcagaagcgg 8460
     1441 cggcgaggac gcgcgcggg cggcagggc ggctcggggc ccggaggcag gggcggcagg 8520
     1442 ggcacgtegg cgccgcgcg gggcaggttc tggtactgcg cccggagaag actggcgtga 8580
     1443 gcgacgacgc gacggttgac gtcctggatc tgacgcctct gggtgaaggc cacgggaccc 8640
     1444 gtgagtttga acctgaaaga gagttcgaca gaatcaatct cggtatcgtt gacggcggcc 8700
     1445 tgccgcagga tctcttgcac gtcgcccgag ttgtcctggt aggcgatctc ggtcatgaac 8760
     1446 tgctcgatct cctcctcctg aaggtctccg cggccggcgc gctcgacggt ggccgcgagg 8820
     1447 tcgttggaga tgcggcccat gagctgcgag aaggcgttca tgccggcctc gttccagacg 8880
     1448 cggctgtaga ccacggctcc gtcggggtcg cgcgcgcaca tgaccacctg ggcgaggttg 8940
     1449 agetegaegt ggegegtgaa gaeegegtag ttgeagagge getggtagag gtagttgage 9000
     1450 gtggtggcga tgtgctcggt gacgaagaag tacatgatcc agcggcggag cggcatctcg 9060
     1451 ctgacqtcqc ccagggcttc caagcqttcc atqgcctcqt agaaqtccac ggcgaagttg 9120
     1452 aaaaactqqq aqttqcqcqc cqaqacqqtc aactcctcct ccaqaaqacq gatqagctcq 9180
     1453 gcgatggtgg cgcgcacctc gcgctcgaag gccccggggg gctcctcttc catctcctcc 9240
     1454 tetteeteet ceactaacat etettetaet teeteeteag gaggeggtgg egggggaggg 9300
     1455 gccctgcgtc gccggcggcg cacgggcaga cggtcgatga agcgctcgat ggtctccccg 9360
     1456 cgccggcgac gcatggtctc ggtgacggcg cgcccgtcct cgcggggccg cagcatgaag 9420
     1457 acgccgccgc gcatctccag gtggccgccg ggggggtctc cgttgggcag ggagagggcg 9480
     1458 ctgacgatgc atcttatcaa ttgacccgta gggactccgc gcaaggacct gagcgtctcg 9540
     1459 agatccacgg gatccgaaaa ccgctgaacg aaggcttcga gccagtcgca gtcgcaaggt 9600
     1460 aggctgagcc cggtttcttg ttcttcgggt atttggtcgg gaggcggcgg gcgatgctgc 9660
     1461 tggtgatgaa gttgaagtag gcggtcctga gacggcggat ggtggcgagg agcaccaggt 9720
     1462 ccttgggccc ggcttgctgg atgcgcagac ggtcggccat gccccaggcg tggtcctgac 9780
     1463 acctggcgag gtccttgtag tagtcctgca tgagccgctc cacgggcacc tcctcctcgc 9840
     1464 ccgcgcggcc gtgcatgcgc gtgagcccga acccgcgctg cggctggacg agcgccaggt 9900
```

Input Set : N:\SSLM\10587389.txt

```
1465 cggcgacgac gcgctcggtg aggatggcct gctggatctg ggtgagggtg gtctggaagt 9960
     1466 cgtcgaagtc gacgaagcgg tggtaggctc cggtgttgat ggtgtaggag cagttggcca 10020
     1467 tgacggacca gttgacggtc tggtggccgg gtcgcacgag ctcgtggtac ttgaggcgcg 10080
     1468 agtaggegeg egtgtegaag atgtagtegt tgeaggegeg caegaggtae tggtateega 10140
     1469 cgaggaagtg cggcggcggc tggcggtaga gcggccatcg ctcggtggcg ggggcgccgg 10200
     1470 gcgcgaggtc ctcgagcatg aggcggtggt agccgtagat gtacctggac atccaggtga 10260
     1471 tgccggcggc ggtggtggag gcgcgcggga actcgcggac gcggttccag atgttgcgca 10320
     1472 gcggcaggaa gtagttcatg gtggccgcgg tctggcccgt gaggcgcgcg cagtcgtgga 10380
     1473 tgctctagac atacgggcaa aaacgaaagc ggtcagcggc tcgactccgt ggcctggagg 10440
     1474 ctaagcgaac gggttgggct gcgcgtgtac cccggttcga atctcgaatc aggctggagc 10500
     1475 cgcagctaac gtggtactgg cactecegte tegacecaag cetgetaacg aaacetecag 10560
     1476 gatacggagg cgggtcgttt tttggccttg gtcgctggtc atgaaaaact agtaagcgcg 10620
     1477 gaaageggee geeegegatg getegetgee gtagtetgga gaaagaateg ceagggttge 10680
     1478 gttgcggtgt gccccggttc gagcctcagc gctcggcgcc ggccggattc cgcggctaac 10740
     1479 gtgggcgtgg ctgccccgtc gtttccaaga ccccttagcc agccgacttc tccagttacg 10800
     1480 gagcgagccc ctcttttttt ttcttgtgtt tttgccagat gcatcccgta ctgcggcaga 10860
     1481 tgcgccccca ccctccacca caaccgcccc taccgcagca gcagcaacag ccggcgcttc 10920
     1482 tgcccccgcc ccagcagcag ccagccacta ccgcggcggc cgccgtgagc ggagccggcg 10980
     1483 ttcagtatga cctggccttg gaagagggcg aggggctggc gcggctgggg gcgtcgtcgc 11040
     1484 cggagcggca cccgcgcgtg cagatgaaaa gggacgctcg cgaggcctac gtgcccaagc 11100
     1485 agaacctgtt cagagacagg agcggcgagg agcccgagga gatgcgcgcc tcccgcttcc 11160
E--> 1487 tegaggegga egagetgaeg gggateagee cegtgegege geaegtggte gnggneaace 11280 per p. 8
     1488 tggtcacggc gtacgagcag accgtgaagg aggagagcaa cttccaaaaa tccttcaaca 11340
     1489 accaegtgeg caecttgate gegegegagg aggtgaceet gggeetgatg caectgtggg 11400
     1490 acctgctgga ggccatcgtg cagaacccca cgagcaagcc gctgacggcg cagctgtttc 11460
     1491 tggtggtgca gcacagtcgg gacaacgaga cgttcaggga ggcgctgctg aatatcaccg 11520
     1492 agecegaggg cegetggete etggacetgg tgaacatttt geagageate gtggtgeagg 11580
     1493 agggggggt gccgctgtcc gagaagctgg cggccatcaa cttctcggtg ctgagtctgg 11640
     1494 gcaagtacta cgctaggaag atctacaaga ccccgtacgt gcccatagac aaggaggtga 11700
     1495 agategaegg gttttacatg egeatgaece tgaaagtget gaecetgage gaegatetgg 11760
     1496 gggtgtaccg caacgacagg atgcaccgcg cggtgagcgc cagccgccgg cgcgagctga 11820
     1497 gcgaccagga gctgatgcac agcctgcagc gggccctgac cggggccggg accgaggggg 11880
     1498 agagetaett tgacatggge geggaeetge getggeagee eageegeegg geettggaag 11940
     1499 ctgccggcgg ttccccctac gtggaggagg tggacgatga ggaggaggag ggcgagtacc 12000
     1500 tggaagactg atggcgcgac cgtatttttg ctagatgcag caacagccac cgccgccgcc 12060
     1501 teetgateee gegatgeggg eggegetgea gageeageeg teeggeatta acteetegga 12120
     1502 cgattggacc caggccatgc aacgcatcat ggcgctgacg acccgcaatc ccgaagcctt 12180
     1503 tagacagcag ceteaggeea aceggetete ggecateetg gaggeegtgg tgeeetegeg 12240
     1504 ctcgaacccc acgcacgaga aggtgctggc catcgtgaac gcgctggtgg agaacaaggc 12300
     1505 catccgcggt gacgaggccg ggctggtgta caacgcgctg ctggagcgcg tggcccgcta 12360
    1506 caacagcacc aacgtgcaga cgaacctgga ccgcatggtg accgacgtgc gcgaggcggt 12420
    1507 gtcgcagcgc gagcggttcc accgcgagtc gaacctgggc tccatggtgg cgctgaacgc 12480
    1508 cttcctgagc acgcagcccg ccaacgtgcc ccggggccag gaggactaca ccaacttcat 12540
    1509 cagegegetg eggetgatgg tggcegaggt geeccagage gaggtgtace agteggggee 12600
    1510 ggactacttc ttccagacca gtcgccaggg cttgcagacc gtgaacctga gccaggcttt 12660
    1511 caagaacttg cagggactgt ggggcgtgca ggccccggtc ggggaccgcg cgacggtgtc 12720
    1512 gagcctgctg acgccgaact cgcgcctgct gctgctgctg gtggcgccct tcacggacag 12780
    1513 cggcagcgtg agccgcgact cgtacctggg ctacctgctt aacctgtacc gcgaggccat 12840
```

Input Set : N:\SSLM\10587389.txt

```
1514 cggacaggcg cacgtggacg agcagaccta ccaggagatc acccacgtga gccgcgct 12900
     1515 gggccaggag gacccgggca acctggaggc caccctgaac ttcctgctga ccaaccggtc 12960
    1516 gcagaagatc ccgccccagt acgcgctgag caccgaggag gagcgcatcc tgcgctacgt 13020
    1517 gcagcagagc gtggggctgt tcctgatgca ggagggggcc acgcccagcg cggcgctcga 13080
     1518 catgacegeg egeaacatgg ageceageat gtacgeeege aacegeeegt teateaataa 13140
     1519 gctgatggac tacttgcatc gggcggccgc catgaactcg gactacttta ccaacgccat 13200
     1520 cttgaacccg cactggctcc cgccgcccgg gttctacacg ggcgagtacg acatgcccga 13260
     1521 ccccaacgac gggttcctgt gggacgacgt ggacagcagc gtgttctcgc cgcgtccagg 13320
     1522 aaccaatgcc gtgtggaaga aagagggcgg ggaccggcgg ccgtcctcgg cgctgtccgg 13380
    1523 tegegegggt getgeegegg eggtgeeega ggeegeeage eeetteeega geetgeeett 13440
     1524 ttcgctgaac agcgtgcgca gcagcgagct gggtcggctg acgcgaccgc gcctgctggg 13500
     1525 cgaggaggag tacctgaacg actccttgtt gaggcccgag cgcgagaaga acttccccaa 13560
     1526 taacgggata gagagcetgg tggacaagat gagcegetgg aagacgtacg egcacgagca 13620
    1527 cagggacgag ccccgagctá gcagcgcagg cacccgtaga cgccagcggc acgacaggca 13680
     1528 geggggaetg gtgtgggaeg atgaggatte egeegaegae ageagegtgt tggaettggg 13740
     1529 tgggagtggt ggtaacccgt tcgctcacct gcgcccccgt atcgggcgcc tgatgtaaga 13800
     1530 atctgaaaaa ataaaagacg gtactcacca aggccatggc gaccagcgtg cgttcttctc 13860
     1531 tgttgtttgt agtagtatga tgaggcgcgt gtacccggag ggtcctcctc cctcgtacga 13920
     1532 gagcgtgatg cagcaggcgg tggcggcggc gatgcagccc ccgctggagg cgccttacgt 13980
     1533 gcccccgcgg tacctggcgc ctacggaggg gcggaacagc attcgttact cggagctggc 14040
     1534 accettgtac gataccacce ggttgtacct ggtggacaac aagteggeag acategeete 14100
    1535 getgaactac cagaacgacc acagcaactt cetgaccacc gtggtgcaga acaacgattt 14160
    1536 caccccacq qaqqccaqca cccaqaccat caactttqac qaqcqctcqc qqtqqqqcqq 14220
    1537 ccagctgaaa accatcatgc acaccaacat gcccaacgtg aacgagttca tgtacagcaa 14280
    1538 caagttcaag gcgcgggtga tggtctcgcg caagaccccc aacggggtgg atgatgatta 14340
    1539 tgatggtagt caggacgagc tgacctacga gtgggtggag tttgagctgc ccgagggcaa 14400
     1540 cttctcggtg accatgacca tcgatctgat gaacaacgcc atcatcgaca actacttggc 14460
    1541 ggtggggcgg cagaacgggg tgctggagag cgacatcggc gtgaagttcg acacgcgcaa 14520
    1542 cttccggctg ggctgggacc ccgtgaccga gctggtgatg ccgggcgtgt acaccaacga 14580
     1543 ggccttccac cccgacatcg tcctgctgcc cggctgcggc gtggacttca ccgagagccg 14640
     1544 cctcagcaac ctgctgggca tccgcaagcg gcagcccttc caggagggct tccagatcct 14700
    1545 gtacgaggac ctggaggggg gcaacatccc cgcgctcttg gatgtcgaag cctacgagaa 14760
     1546 aagcaaggag gatagcaccg ccgcggcgac cgcagccgtg gccaccgcct ctaccgaggt 14820
    1547 geggggegat aattttgeta gegetgegge ageggeegag geggetgaaa eegaaagtaa 14880
    1548 gatagtcatc cagccggtgg agaaggacag caaggacagg agctacaacg tgctcgcgga 14940
    1549 caagaaaaac accgcctacc gcagctggta cctggcctac aactacggcg accccgagaa 15000
    1550 gggcgtgcgc tcctggacgc tgctcaccac ctcggacgtc acctgcggcg tggagcaagt 15060
    1551 ctactgqtcg ctgcccgaca tgatgcaaga cccggtcacc ttccgctcca cgcgtcaagt 15120
    1552 tagcaactac ccggtggtgg gcgccgagct cctgcccgtc tactccaaga gcttcttcaa 15180
E--> 1553 cgagcaggec gtctactege agnagetgeg egeetteace tegeteacge acgtetteaa 15240
     1554 ccgcttcccc gagaaccaga tcctcgtccg ccgccgcgcc caccattacc accgtcagtg 15300
    1555 aaaacgttcc tgctctcaca gatcacggga ccctgccgct gcgcagcagt atccggggag 15360
    ·1556 tccagcgcgt gaccgtcact gacgccagac gccgcacctg cccctacgtc tacaaggccc 15420
    1557 tgggcgtagt cgcgccgcgc gtcctctcga gccgcacctt ctaaaaaatg tccattctca 15480
    1559 tetegeecag taataacace ggttggggee tgegegegee cageaagatg taeggaggeg 15540
    1560 ctcgccaacg ctccacgcaa caccccgtgc gcgtgcgcgg gcacttccgc gctccctggg 15600
    1561 gegeceteaa gggeegegtg egetegegea ceaeegtega egaegtgate gaeeaggtgg 15660
    1562 tqqccqacqc qcgcaactac acgcccqccq ccgcqccqt ctccaccgtg gacgccgtca 15720
    1563 tegacagegt ggtggeegae gegegeeggt aegeeegeae caagageegg eggeggegea 15780
```

Input Set : N:\SSLM\10587389.txt

				•		•	
					gcgagccttg		
					acgcgcggcc		
					ggcggcggcc		
					cgccgccacc		
1568	tgcccgtgcg	cacccgcccc	cctcgcactt	gaagatgctg	acttcgcgat	gttgatgtgt	16080
1569	cccagcggcg	aggaggatgt	ccaagcgcaa	atacaaggaa	gagatgctcc	aggtcatcgc	16140
1570	gcctgagatc	tacggccccg	cggcggcggt	gaaggaggaa	agaaagcccc	gcaaactgaa	16200
1571	gcgggtcaaa	aaggacaaaa	aggaggagga	agatgacgga	ctggtggagt	ttgtgcgcga	16260
					gtgaaaccgg		
					tccgcctcca		
1574	cgacgaggtg	tacggggacg	aggacatcct	cgagcaggcg	gtcgagcgtc	tgggcgagtt	16440
					gaggcggtgt		
					ctgcagcagg		
					gatctgtacc		
					gagcacatga		
					gtggccccgg		
					acgcagaccg		
					atgccagcac		
					ctgatgccca		
					gcgcttctac		
					tcgcagccgc		
					gcgcgagcct		
					gcctcctact		
					gaggaagaaa		
					ggcggcggcg		
					tcatcgccgc		
					agcgccactg		
					cctggtcctg		
					gacacggcac		
					ggggcgcctt		
					aaacctatgg		
					aagaacagaa		
					ttgacctggc		
					ccgcggggtc		
					gcgacaagcg		
					ccccgtacga		
					ccaccggagt		
					gcccctccac		
1602	cccctgccgc	cggtggccgt	cgcgtcgcgc	gcccccgag	gccgcccca	ggcgaactgg	18120
1603	cagagcactc	tgaacagcat	cgtgggtctg	ggagtgcaga	gtgtgaagcg	ccgccgctgc	18180
1604	tattaaaaga	cactgtagcg	cttaacttgc	ttgtctgtgt	gtatatgtat	gtccgccgac	18240
1605	cagaaggagg	agtgtgaaga	ggcgcgtcgc	cgagttgcaa	gatggccacc	ccatcgatgc	18300
1606	tgccccagtg	ggcgtacatg	cacatcgccg	gacaggacgc	ttcggagtac	ctgagtccgg	18360
					tctggggaac		
				_	cagccagcgg		
					caaagtgcgc		
					ctttgacatc		
					ctacaacagc		
					aggcaatggg		
					55555	33	

Input Set : N:\SSLM\10587389.txt

Output Set: N:\CRF4\08092006\J587389.raw

1613 aaacacacac atatggtgtg gccccaatgg gcggagagaa tattacaaaa gatggtcttc 18780 1614 aaattggaac tgacgttaca gcgaatcaga ataaaccaat ttatgccgac aaaacatttc 18840 1615 aaccagaacc gcaagtagga gaagaaaatt ggcaagaaac tgaaaacttt tatggcggta 18900 1616 gagetettaa aaaagacaca aacatgaaac ettgetatgg eteetatget agaceeacca 18960 1617 atgaaaaagg aggtcaagct aaacttaaag ttggagatga tggagttcca accaaagaat 19020 1618 tegacataga cetggettte tttgataete eeggtggeac egtgaaeggt caagaegagt 19080 1619 ataaagcaga cattgtcatg tataccgaaa acacgtattt ggaaactcca gacacgcatg 19140 1620 tggtatacaa accaggcaag gatgatgcaa gttctgaaat taacctggtt cagcagtcta 19200 1621 tgcccaacag acccaactac attgggttca gggacaactt tatcggtctt atgtactaca 19260 1622 acagcactgg caatatgggt gtgcttgctg gtcaggcctc ccagctgaat gctgtggttg 19320 1623 atttgcaaga cagaaacacc gagctgtcct accagctctt gcttgactct ttgggtgaca 19380 1624 gaacccggta tttcagtatg tggaaccagg cggtggacag ttatgacccc gatgtgcgca 19440 1625 tcatcgaaaa ccatggtgtg gaggatgaat tgccaaacta ttgcttcccc ttggacggct 19500 1626 ctggcactaa cgccgcatac caaggtgtga aagtaaaaga tggtcaagat ggtgatgttg 19560 1627 agagtgaatg ggaaaatgac gatactgttg cagctcgaaa tcaattatgt aaaggtaaca 19620 1628 ttttcgccat ggagattaat ctccaggcta acctgtggag aagtttcctc tactcgaacg 19680 1629 tgqccctqta cctqcccqac tcctacaaqt acacqccgac caacqtcacg ctgccgacca 19740 1630 acaccaacac ctacqattac atqaatqqca qaqtqacacc tccctcqctg gtagacqcct 19800 1631 acctcaacat cggggggggc tggtcgctgg accccatgga caacgtcaac cccttcaacc 19860 1632 accaccgcaa cgcgggcctg cgctaccgct ccatgctcct gggcaacggg cgctacgtgc 19920 . . 1633 cettecacat ceaggtgeec caaaagtttt tegecateaa gageeteetg eteetgeeeg 19980 1634 ggtcctacac ctacgagtgg aacttccgca aggacgtcaa catgatcctg cagagctccc 20040 1635 taggcaacga cctgcgcacg gacggggcct ccatcgcctt caccagcatc aacctctacg 20100 1636 ccaccttctt ccccatqqcq cacaacaccq cctccacqct cqaqqccatq ctqcgcaacq 20160 1637 acaccaacga ccagtccttc aacgactacc tctcggcggc caacatgctc taccccatcc 20220 1638 cggccaacgc caccaacgtg cccatctcca tcccctcgcg caactgggcc gccttccgcg 20280 1639 gatggtcctt cacgcgcctg aagacccgcg agacgccctc gctcggctcc gggttcgacc 20340 1640 cctacttcgt ctactcgggc tccatcccct acctagacgg caccttctac ctcaaccaca 20400 1641 ccttcaagaa ggtctccatc accttcgact cctccgtcag ctggcccggc aacgaccgcc 20460 1642 teetgaegee caaegagtte gaaateaage geaeegtega eggagaggga tacaaegtgg 20520 1643 cccagtgcaa catgaccaag gactggttcc tggtccagat gctggcccac tacaacatcg 20580 1644 gctaccaggg cttctacgtg cccgagggct acaaggaccg catgtactcc ttcttccgca 20640 1645 acttccagcc catgagccgc caggtcgtgg acgaggtcaa ctacaaggac taccaggccg 20700 1646 traccetgge ctaccageae aacaactegg gettegtegg ctacctegeg cccaccatge 20760 1647 gecagggeca gecetaecce gecaactace ectaeceget categgeaag agegeegteg 20820 1648 ccagcgtcac ccagaaaaag ttcctctgcg accgggtcat gtggcgcatc cccttctcca 20880 1649 getteeteaa tgeecaetee geetaettte geteecaeeg egegegeate gagaaggeea 20940 1650 gcaacttcat gtccatgggc gcgctcaccg acctcggcca gaacatgctc tacgccaact 21000 1651 ccgcccacgc gctagacatg aatttcgaag tcgaccccat ggatgagtcc acccttctct 21060 1652 atgttgtctt cgaagtcttc gacgtcgtcc gagtgcacca gccccaccgc ggcgtcatcg 21120 1653 aagccgtcta cctgcgcacg cccttctcgg ccggcaacgc caccacctaa gccgctcttg 21180 1654 cttcttgcaa gatgacggcg ggctccggcg agcaggagct cagggccatc ctccgcgacc 21240 1655 tgggctgcgg gccctgcttc ctgggcacct tcgacaagcg cttccctgga ttcatggccc 21300 1656 cgcacaagct ggcctgcgcc atcgtgaaca cggccggccg cgagaccggg ggcgagcact 21360 1657 ggctggcctt cgcctggaac ccgcgctccc acacatgcta cctcttcgac cccttcgggt 21420 1658 totoggacga gcgcotcaag cagatotaco agttcgagta cgagggcctg ctgcgtcgca 21480 1659 gcgccctggc caccgaggac cgctgcgtca ccctggaaaa gtccacccag accgtgcagg 21540 1660 gtccgcgctc ggccgcctgc gggctcttct gctgcatgtt cctgcacgcc ttcgtgcact 21600 1661 ggcccgaccg ccccatggac aagaacccca ccatgaactt actgacgggg gtgcccaacg 21660

Input Set : N:\SSLM\10587389.txt

```
1662 geatgeteca gtegececag gtggaaceca ceetgegeeg caaccaggaa gegetetace 21720
       1663 ccgccttcga ccgcatgaat caagacatgt aaaaaaccgg tgtgtgtatg tgaatgcttt 21780
       1664 attcataata aacagcacat gtttatgcca ccttctctga ggctctgact ttatttagaa 21840
       1665 atcgaagggg ttctgccggc tctcggcatg gcccgcgggc agggatacgt tgcggaactg 21900
       1666 gtacttgggc agccacttga actcggggat cagcagcttg ggcacgggga ggtcggggaa 21960
       1667 cgagtcgctc cacagcttgc gcgtgagttg cagggcgccc agcaggtcgg gcgcggagat 22020
       1668 cttgaaatcg cagttgggac ccgcgttctg cgcgcgagag ttgcggtaca cggggttgca 22080
       1669 gcactggaac accatcaggg ccgggtgctt cacgcttgcc agcaccgtcg cgtcggtgat 22140
       1670 gccctccacg tccagatcct cggcgttggc catcccgaag ggggtcatct tgcaggtctg 22200
       1671 ccgccccatg ctgggcacgc agccgggctt gtggttgcaa tcgcagtgca gggggatcag 22260
       1672 catcatetgg gcctgctcgg agctcatgcc cgggtacatg gccttcatga aagccttcag 22320
       1673 ctggcggaag gcctgctgcg ccttgccgcc ctcggtgaag aagaccccgc aggacttgct 22380
       1674 agagaactgg ttggtggcgc agccggcgtc gtgcacgcag cagcgcgcgt cgttgttggc 22440
       1675 cagetgeace acgetgegee eccageggtt etgggtgate ttggeeeggt tggggttete 22500
       1676 cttcagegeg egetgeeegt tetegetege cacatecate tegatagtgt geteettetg 22560
       1677 gatcatcacg gtcccgtgca ggcaccgcag cttgccctcg gcttcggtgc agccgtgcag 22620
       1678 ccacagegeg cageeggtge acteecagtt ettgtgggeg atetgggagt gegagtgeac 22680
       1679 gaagccctgc aggaagcggc ccatcatcgc ggtcagggtc ttgttgctgg tgaaggtcag 22740
       1680 cgggatgccg cggtgctcct cgttcacata caggtggcag atgcggcggt acacctcgcc 22800
       1681 ctgctcgggc atcagctgga aggcggactt caggtcgctc tccacgcggt accggtccat 22860
       1682 cagcagegte atcaetteca tgeeettete eeaggeegaa aegateggea ggeteagggg 22920
       1683 gttcttcacc gccattgtca tcttagtcgc cgccqccgaq gtcaqggggt cgttctcgtc 22980
       1684 cagggtetea aacaeteget tgeegteett etegatgatg egeaeggggg gaaagetgaa 23040
       1685 geccaeggee gecageteet ceteggeetg cetttegtee tegetgteet ggetgatgte 23100
       1686 ttgcaaaggc acatgcttgg tcttgcgggg tttctttttg ggcggcagag gcggcggcga 23160
       1687 tgtgctggga gagcgcgagt tctcgttcac cacgactatt tcttcttctt ggccgtcgtc 23220
       1688 cgagaccacg cggcggtagg catgcctctt ctggggcaga ggcggaggcg acgggctctc 23280
       1689 geggttegge gggeggetgg cagageceet teegegtteg ggggtgeget cetggeggeg 23340
       1690 ctgctctgac tgacttcctc cgcggccggc cattgtgttc tcctagggag caacaacaag 23400
       1691 catggagact cagccatcgt cgccaacatc gccatctgcc cccgccgcca ccgccgacga 23460
       1692 gaaccagcag cagaatgaaa gcttaaccgc cccgccgccc agccccacct ccgacgccgc 23520
       1693 ggccccagac atgcaagaga tggaggaatc catcgagatt gacctgggct acgtgacgcc 23580
       1694 cgcggagcac gaggaggagc tggcagcgcg cttttcagcc ccggaagaga accaccaaga 23640
       1695 gcagccagag caggaagcag agaacgagca gaaccaggct gggcacgagc atggcgacta 23700
       1696 cctgagcggg gcagaggacg tgctcatcaa gcatctggcc cgccaatgca tcatcgtcaa 23760
       1697 ggacgcgctg ctcgaccgcg ccgaggtgcc cctcagcgtg gcggagctca gccgcgccta 23820
       1698 cqaqcqcaac ctcttctcqc cqcqcqtqcc ccccaaqcqc caqcccaacq qcacctqtqa 23880
       1699 geccaaceeg egecteaact tetaceeggt ettegeggtg eeegaggeee tggecaeeta 23940
       1700 ccacctettt ttcaagaacc aaaggateec egteteetge egegeeaace gcaccegege 24000
       1701 cgacgccctg ctcaacctgg gccccggcgc ccgcctacct gatatcacct ccttggaaga 24060
       1702 ggttcccaag atcttcgagg gtctgggcag cgacgagact cgggccgcga acgctctgca 24120
       1703 aggaagegga gaggageatg ageaceaeag egeeetggtg gagttggaag gegaeaaege 24180
       1704 gegeetggeg gteetcaage geaeggtega getgaeecae ttegeetaee eggegeteaa 24240
       1705 cctgccccc aaggtcatga gcgccgtcat ggaccaggtg ctcatcaagc gcgcctcgcc 24300
B--> 1707 cgacgagcag ctggcgcgct ggctgggagc gagtancacc ccccagagcc tggaagagcg 24420 μρ. /8
1708 gcqcaagctc atgatagcgg tagtagtagt careers consistent consist
       1708 gcgcaagete atgatggccg tggtcctggt gaccgtggag ctggagtgte tgcgccgctt 24480
       1709 ctttgccgac gcggagaccc tgcgcaaggt cgaggagaac ctgcactacc tcttcaggca 24540
       1710 cgggttcgtg cgccaggcct gcaagatctc caacgtggag ctgaccaacc tggtctccta 24600
```

Input Set : N:\SSLM\10587389.txt

```
1711 catgggcatc ctgcacgaga accgcctggg gcaaaacgtg ctgcacacca ccctgcgcgg 24660
     1712 ggaggcccgc cgcgactaca tccqcgactq cqtctacctq tacctctqcc acacctqqca 24720
     1713 gacgggcatg ggcgtgtggc agcagtgcct ggaggagcag aacctgaaag agctctgcaa 24780
     1714 geteetgeag aagaacetea aggeeetgtg gaeegggtte gaegagegta eeacegeete 24840
     1715 ggacctggcc gacctcatct tccccgagcg cctgcggctg acgctgcgca acgggctgcc 24900
     1716 cgactttatg agccaaagca tgttgcaaaa ctttcgctct ttcatcctcg aacgctccgg 24960
     1717 gatectgece gecaectget eegegetgee eteggaette gtgeegetga eetteegega 25020
     1718 gtgccccccg ccgctctgga gccactgcta cttgctgcgc ctggccaact acctggccta 25080
     1719 ccacteggae gtgategagg aegteagegg egagggtetg etggagtgee aetgeegetg 25140
     1720 caacetetge acgecgeace getecetgge etgeaacece cagetgetga gegagaceca 25200
     1721 gatcatcggc accttcgagt tgcaaggccc cggcgacggc gagggcaagg ggggtctgaa 25260
     1722 actcaccccg gggctgtgga cctcggccta cttgcgcaag ttcgtgcccg aggactacca 25320
     1723 tecettegag ateaggttet aegaggacea ateceageeg cecaaggeeg agetgtegge 25380
     1724 ctgcgtcatc acccaggggg ccatcctggc ccaattgcaa gccatccaga aatcccgcca 25440
     1725 agaatttctg ctgaaaaagg gccacggggt ctacttggac ccccagaccg gagaggagct 25500
     1726 caaccccagc ttcccccagg atgccccgag gaagcagcaa gaagctgaaa gtggagctgc 25560
     1727 cgccgccgga ggatttggag gaagactggg agagcagtca ggcagaggag gaggagatgg 25620
     1728 aagactggga cagcactcag gcagaggagg acagcctgca agacagtctg gaggaggaag 25680
     1729 acgaggtgga ggaggcagag gaagaagcag ccgccgccag accgtcgtcc tcggcggaga 25740
     1730 aagcaagcag cacggatacc atctccgctc cgggtcgggg tcgcgggggc cgggcccaca 25800
     1731 gtaggtggga cgagaccggg cgcttccgaa ccccaccacc cagaccggta agaaggagcg 25860
     1732 gcagggatac aagteetgge gggggcacaa aaacgccate gteteetget tgcaageetg 25920
     1733 cgggggcaac atctccttca cccggcgcta cctgctcttt caccgcgggg tgaacttccc 25980
     1734 ccgcaacatc ttgcattact accgtcacct ccacagcccc tactactgtt tccaagaaga 26040
     1735 ggcagaaacc cagcagcagc agaaaaccag cggcagcagc agctagaaaa tccacagcgg 26100
     1736 cggcaggtgg actgaggatc gcggcgaacg agccggcgca gacccgggag ctgaggaacc 26160
     1737 ggatctttcc caccctctat gccatcttcc agcagagtcg ggggcaggag caggaactga 26220
     1738 aagtcaagaa ccgttctctg cgctcgctca cccgcagttg tctgtatcac aagagcgaag 26280
     1739 accaacttca gegeactete gaggaegeeg aggetetett caacaagtae tgegegetea 26340
     1740 ctcttaaaga gtagcccgcg cccgcccaca cacggaaaaa ggcgggaatt acgtcaccac 26400
     1741 ctgcgccctt cgcccgacca tcatgagcaa agagattccc acgccttaca tgtggagcta 26460
     1742 ccagccccag atgggcctgg ccgccggcgc cgcccaggac tactccaccc gcatgaactg 26520
     1743 getcagtgcc gggcccgcga tgatctcacg ggtgaatgac atccgcgccc accgaaacca 26580
     1744 gatactecta gaacagteag egateacege caegeceege cateacetta ateegegtaa 26640
     1745 ttggcccgcc gccctggtgt accaggaaat tccccagccc acgaccgtac tacttccgcg 26700
     1746 agacgcccag gccgaagtcc agctgactaa ctcaggtgtc cagctggccg gcggcgccgc 26760
     1747 cetgtgtegt cacegeeceg etcagggtat aaageggetg gtgateegag geagaggeac 26820
     1748 acageteaac gacgaggtgg tgagetette getgggtetg egacetgaeg gagtetteca 26880
     1749 actegeogga teggggagat etteetteae geetegteag geegteetga etttggagag 26940
     1750 ttcgtcctcg_cagccccgct cgggcggcat cggcactctc cagttcgtgg aggagttcac 27000
E--> 1751 teceteggth tactteaace cetteteegg etececegge cactaceegg aggagtteat 27060 p. /8
     1752 cccgaacttc gacgccatca gcgagtcggt ggacggctac gattgaatgt cccatggtgg 27120
     1753 cgcagctgac ctagctcggc ttcgacacct ggaccactgc cgccgcttcc gctgcttcgc 27180
     1754 tegggatete geogagtttg cetaetttga getgeeegag gageaceete agggeeeage 27240
     1755 ccacggagtg cggatcatcg tcgaaggggg cctcgactcc cacctgcttc ggatcttcag 27300
     1756 ccagcgaccg atcctggtcg agcgcgaaca aggacagacc cttcttactt tgtactgcat 27360
     1757 ctgcaaccac cccggcctgc atgaaagtct ttgttgtctg ctgtgtactg agtataataa 27420
     1758 aagctgagat cagcgactac tccggactcg attgtggtgt tcctgctatc aaccggtccc 27480
     1759 tgttcttcac cgggaacgag accgagetcc agetccagtg taagecccac aagaaqtacc 27540
```

Input Set : N:\SSLM\10587389.txt

```
1760 teacetgget gttecaggge teecegateg cegttgteaa ceaetgegae aacgaeggag 27600
    1761 tectgetgag eggeeetgee aacettaett tttecaceeg eagaageaag etceagetet 27660
    1762 tecaaccett ceteceeggg acetateagt gegteteagg accetgeeat cacacettee 27720
    1763 acctgatece gaataceaca gegeegetee eegetactaa caaccaaact acceaceaac 27780
    1764 gecaceqteg egacetttee tetgaateta ataccaetae eggaggtgag eteegaggte 27840
    1765 gaccaacctc tgggatttac tacggcccct gggaggtggt ggggttaata gcgctaggcc 27900
    1766 taqttqcqqq tqqqcttttq qttctctqct acctatacct cccttqctqt tcgtacttag 27960
    1767 tggtgctgtg ttgctggttt aagaaatggg gaagatcacc ctagtgagct gcggtgcgct 28020
    1768 ggtggcggtg ttgctttcga ttgtgggact gggcggcgcg gctgtagtga aggagaaggc 28080
    1769 cgatccctgc ttgcatttca atcccaacaa atgccagctg agttttcagc ccgatggcaa 28140
    1770 tcggtgcgcg gtactgatca agtgcggatg ggaatgcgag aacgtgagaa tcgagtacaa 28200
    1771 taacaagact cggaacaata ctctcgcgtc cgtgtggcag cccggggacc ccgagtggta 28260
    1772 caccetetet gteeceggtg etgaeggete eeeggeace gtgaataata ettteatttt 28320
    1773 tgcgcacatg tgcaacacgg tcatgtggat gagcaagcag tacgatatgt ggccccccac 28380
    1774 gaaggagaac atcgtggtct tctccatcgc ttacagcctg tgcacggcgc taatcaccgc 28440
    1775 tatcgtgtgc ctgagcattc acatgctcat cgctattcgc cccagaaata atgccgagaa 28500
    1776 agagaaacag ccataacacg ttttttcaca caccttgttt ttacagacaa tgcgtctgtt 28560
    1777 aaatttttta aacattgtgc tcagtattgc ttatgcctct ggttatgcaa acatacagaa 28620
E--> 1778 aaccetttat gtaggatetg atggtacaet agagngtace caateacaag ceaaggttge 28680 see p. 18
    1779 atggtatttt tatagaacca acactgatcc agttaaactt tgtaagggtg aattgccgcg 28740
    1780 tacacataaa actccactta catttagttg cagcaataat aatcttacac ttttttcaat 28800
    1781 tacaaaacaa tatactggta cttattacag tacaaacttt catacaggac aagataaata 28860
    1782 ttatactgtt aaggtagaaa atcctaccac tcctagaact accaccacca ccactactgc 28920
    1783 aaagcccact gtgaaaacta caactaggac caccacaact acagaaacca ccaccagcac 28980
    1784 aacacttqct qcaactacac acacacac taaqctaacc ttacaqacca ctaatqattt 29040
    1785 gatcgccctg ctgcaaaagg gggataacag caccacttcc aatgaggaga tacccaaatc 29100
    1786 catgattggc attattgttg ctgtagtggt gtgcatgttg atcatcgcct tgtgcatggt 29160
    1787 gtactatgcc ttctgctaca gaaagcacag actgaacgac aagctggaac acttactaag 29220
    1788 tgttgaattt taatttttta gaaccatgaa gatcctaggc ctttttagtt tttctatcat 29280
    1789 tacctctgct ctttgtgaat cagtggatag agatgttact attaccactg gttctaatta 29340
    1790 tacactgaaa gggccaccct caggtatgct ttcgtggtat tgctattttg gaactgacac 29400
    1791 tgatcaaact gaattatgca attttcaaaa aggcaaaacc tcaaactcta aaatctctaa 29460
    1792 ttatcaatgc aatggcactg atctgatact actcaatgtc acgaaagcat atggtggcag 29520
    1793 ttattattgc cctggacaaa acactgaaga aatgattttt tacaaagtgg aagtggttga 29580
    1794 teccaetaca ecaeceacea ecaeaaetat teataecaea eacaeagaae aaacaecaga 29640
    1795 ggcaacagaa gcagagttgg ccttccaggt tcacggagat tcctttgctg tcaatacccc 29700
    1796 tacaccegat cageggtgte eggggeeget agteagegge attgteggtg tgettteggg 29760
    1797 attagcagtc ataatcatct gcatgttcat ttttgcttgc tgctatagaa ggctttaccg 29820
    1798 acaaaaatca gacccactgc tgaacctcta tgtttaattt tttccagagc catgaaggca 29880
    1799 gttagcgctc tagttttttg ttctttgatt ggcattgttt ttaatagtaa aattaccaga 29940
    1800 gttagcttta ttaaacatgt taatgtaact gaaggagata acatcacact agcaggtgta 30000
    1801 qaaqqtqctc aaaacaccac ctqqacaaaa taccatctaq qatqqaqaq tatttqcacc 30060
    1802 tggaatgtaa cttattattg cataggagtt aatcttacca ttgttaacgc taaccaatct 30120
    1803 cagaatgggt taattaaagg acagagtgtt agtgtgacca gtgatgggta ctatacccag 30180
    1804 catagtttta actacaacat tactgtcata ccactgccta cgcctagccc acctagcact 30240
    1805 accacacaga caaccacata cagtacatca aatcagccta ccaccactac agcagcagag 30300
    1806 gttgccaget egtetggggt eegagtggea tttttgatgt tggeeceate tageagteee 30360
    1808 getaceteca qtgcettete tageacegee aateteteet egettteete tacaceaate 30480
```

Input Set : N:\SSLM\10587389.txt

```
1809 agccccgcta ctactcctag ccccgctcct cttcccactc ccctgaagca aacagacggc 30540
    1810 ggcatgcaat ggcagatcac cctgctcatt gtgatcgggt tggtcatcct ggccgtgttg 30600
    1811 ctctactaca tcttctgccg ccgcattccc aacgcgcacc gcaagccggc ctacaagccc 30660
    E--> 1813 tettttacag tatggtgatt gaan atgat teetagacaa ttettgatea etattettat 30780 suc. 18
     1814 ctgcctcctc caagtctgtg ccaccctcgc tctggtggcc aacgccagtc cagactgtat 30840
    1816 tgggcccttc gcctcctacg tgctctttgc cttcgtcacc tgcatctgct gctgtagcat 30900
    1817 agtctgcctg cttatcacct tcttccagtt cattgactgg atctttgtgc gcatcgccta 30960
    1818 cetgegeeac cacececagt acegsgacca gegagtggeg cagetgetea ggeteetetg 31020
B--> 1819 ataagcatge gggetetget acttobeegg ettetgetgt tagtgeteee eegteeegte 31080
    1820 gacccceggt cccccactca gtccccgag gaggttcgca aatgcaaatt ccaagaaccc 31140
    1821 tggaaattcc tcaaatgcta ccgccaaaaa tcagacatgc atcccagctg gatcatgatc 31200
     1822 attgggatcg tgaacattct ggcctgcacc ctcatctcct ttgtgattta cccctgcttt 31260
    1823 gactttggtt ggaactcgcc agaggcgctc tatctcccgc ctgaacctga cacaccacca 31320
    1824 cagcatcaac ctcaggcaca cgcactacca ccaccacagc ctaggccaca atacatgccc 31380
     1825 atattagact atgaggccga gccacagcga cccatgctcc ccgctattag ttacttcaat 31440
    1826 ctaaccqqcq qaqatqactq acccactqqc caataacaac qtcaacqacc ttctcctqqa 31500
    1827 catqqacqqc cqcqcctcqq aqcaqcqact cqcccaactt cqcattcqtc agcagcagga 31560
    1828 gagagccgtc aaggagctgc aggacggcat agccatccac cagtgcaaga gaggcatctt 31620
    1829 ctgcctggtg aaacaggcca agatctccta cgaggtcacc cagaccgacc atcgcctctc 31680
    1830 ctacgagete etgeageage gecagaagtt cacetgeetg gteggagtea acceeategt 31740
    1831 catcacccag ccagcagtcg ggcgatacca aggggtgcat ccactgctcc tgcgactccc 31800
    1832 ccqactqcqt ccacactctq atcaaqaccc tctqcqqcct ccqcqacctc ctccccatga 31860
    1833 actaatcacc cccttatcca gtgaaataaa gatcatattg atgatgattt aaataaaaaa 31920
    1834 aataatcatt tgatttgaaa taaagataca atcatattga tgatttgagt ttaacaaaaa 31980
    1835 taaagaatca cttacttgaa atctgatacc aggtctctgt ccatgttttc tgccaacacc 32040
    1836 acctcactcc cctcttccca gctctggtac tgcaggcccc ggcgggctgc aaacttcctc 32100
    1837 cacacgotga aggggatgto aaattootoo tgtoootoaa tottoatttt atottotato 32160
    1838 agatgtecaa aaagegegte egggtggatg atgaettega eecegtetae eectaegatg 32220
    1839 cagacaacgc accgaccgtg cccttcatca accccccctt cgtctcttca gatggattcc 32280
    1840 aagagaagee eetgggggtg ttgteeetge gaetggetga eeeegteaee aecaagaaeg 32340
    1841 gggaaatcac cctcaagctg ggagaggggg tggacctcga ctcgtcggga aaactcatct 32400
    1842 ccaacacggc caccaaggcc gccgccctc tcagtatttc aaacaacacc atttccctta 32460
    1843 aaactgctgc ccctttctac aacaacaatg gaactttaag cctcaatgtc tccacaccat 32520
    1844 tagcagtatt teccacattt aacaetttag geataagtet tggaaaeggt etteagaett 32580
    1845 caaataagtt gttgactgta caactaactc atcctcttac attcagctca aatagcatca 32640
    1846 cagtaaaaac agacaaaggg ctatatatta actccagtgg aaacagagga cttgaggcta 32700
    1847 atataagcct aaaaagagga ctagtttttg acggtaatgc tattgcaaca tatattggaa 32760
    1848 atggcttaga ctatggatct tatgatagtg atggaaaaac aagacccgta attaccaaaa 32820
    1849 ttqqaqcaqq attaaatttt qatqctaaca aagcaataqc tqtcaaacta ggcacaggtt 32880
    1850 taagttttga ctccgctggt gccttgacag ctggaaacaa acaggatgac aagctaacac 32940
    1851 tttqqactac ccctqaccca agccctaatt gtcaattact ttcagacaga gatgccaaat 33000
    1852 ttactctctg tcttacaaaa tgcggtagtc aaatactagg cactgtggca gtggcggctg 33060
    1853 ttactgtagg atcagcacta aatccaatta atgacacagt caaaagcgcc atagttttcc 33120
    1854 ttagatttga ttccgatggt gtactcatgt caaactcatc aatggtaggt gattactgga 33180
    1855 actttaggga gggacagacc actcaaagtg tagcctatac aaatgctgtg ggattcatgc 33240
    1856 caaatatagg tgcatatcca aaaacccaaa gtaaaacacc taaaaatagc atagtcagtc 33300
    1857 aggtatattt aactggagaa actactatgc caatgacact aaccataact ttcaatggca 33360
    1858 ctgatgaaaa agacacaacc ccagttagca cctactctat gacttttaca tggcagtgga 33420
```

Input Set : N:\SSLM\10587389.txt

1859	ctggagacta	taaggacaaa	aatattacct	ttgctaccaa	ctcattctct	ttttcctaca	33480
1860	tcgcccagga	ataatcccac	ccagcaagcc	aacccctttt	cccaccacct	ttgtctatat	33540
1861	ggaaactctg	aaacagaaaa	ataaagttca	agtgttttat	tgaatcaaca	gttttacagg	33600
			tccaccctcc				
			aatgccattg				
			cagtctcgga				
			gctcaacagc				
			gagcggcggt				
			cgcagcagtc				
			gactccctca				
			cagcgcatgc				
1870	aacacaggac	caccaggttg	ttcaacagtc	catagttcaa	cacgctccag	ccgaaactca	34140
1871	tcgcgggaag	gatgctaccc	acgtggccgt	cgtaccagat	cctcaggtaa	atcaagtggc	34200
1872	gctccctcca	gaagacgctg	cccatgtaca	tgatctcctt	gggcatgtgg	cggttcacca	34260
1873	cctcccggta	ccacatcacc	ctctggttga	acatgcagcc	ccggatgatc	ctgcggaacc	34320
1874	acagggccag	caccgccccg	cccgccatgc	agcgaagaga	ccccggatcc	cggcaatgac	34380
1875	aatggaggac	ccaccgctcg	tacccgtgga	tcatctggga	gctgaacaag	tctatgttgg	34440
			atgcatctct				
			aactcttgca				
1878	ctcgcacata	acttacattg.	tgcatggaca	gggtatcgca	atcaggcagc	accgggtgat	34620
1879	cctccaccag	agaagcgcgg	gtctcggtct	cctcacagcg	tggtaagggg	gccggccgat	34680
1880	acgggtgatg	gcgggacgcg	gctgatcgtg	ttctcgaccg	tgtcatgatg	cagttgcttt	34740
1881	cggacatttt	cgtacttgct	gtagcagaac	ctggtccggg	cgctgcacac	cgatcgccgg	34800
1882	cggcggtctc	ggcgcttgga	acgctcggtg	ttaaagttgt	aaaacagcca	ctctctcaga	34860
1883	ccgtgcagca	gatctagggc	ctcaggagtg	atgaagatcc	catcatgcct	gatagctctg	34920
1884	atcacatcga	ccaccgtgga	atgggccagg	cccagccaga	tgatgcaatt	ttgttgggtt	34980
1885	tcggtgacgg	cgggggaggg	aagaacagga	agaaccatga	ttaactttta	atccaaacgg	35040
1886	tctcggagca	cttcaaaatg	aaggtcacgg	agatggcacc	tetegecece	gctgtgttgg	35100
			aaaggtgata				
			atcagaaaca				
			cactcctgca				
			tcctgaggta				
			attcttaagc				
			tgacaagcgg				
			gtaagtactc				
			aagggcaagc				
			gattgaaata				
			cgggtaagca				
			cctcgggaac				
			tctgtaaaaa				
			atcgttctct				
			tcgctatgat				
			gaagaagcat				
			gcaatgaggc				
			cacaaaattt				
			tcccgatccc				
			agcagcggca				
			cgctctctgc				
1907	taaaggccaa	agtctaaaaa	tacccgccaa	ataatcacac	acgcccagca	cacgcccaga	36360

Input Set : N:\SSLM\10587389.txt

Output Set: N:\CRF4\08092006\J587389.raw

1908 aaccggtgac acactcagaa aaatacgcgc acttcctcaa acggccaaac tgccgtcatt 36420

```
1909 teegggttee caegetacgt cateaaaaca egaettteaa atteegtega eegttaaaaa 36480
     1910 catcaccege eccegeceta aeggtegeeg etceegeage caatcacett cetecetece 36540
     1911 caaattcaaa cagctcattt gcatattaac gcgcaccaaa agtttgaggt atattattga 36600
     1912 tgatgg
     3852 <210> SEQ ID NO: 24
     3853 <211> LENGTH: 2883
     3854 <212> TYPE: DNA
     3855 <213> ORGANISM: Chimpanzee Adenovirus- ChAd 17 Hexon
     3857 <400> SEQUENCE: 24
     3858 atggcgaccc categatgat geegeagtgg tegtacatge acateteggg ceaggaegee 60
E--> 3859 tondagtace tgageceegg getggtgeag ttegeeegeg ceaeegagag etaetteage 120
     3860 ctyagtaaca agtttaggaa ccccacggtg gcgcccacgc acgatgtgac caccgaccgg 180
     3861 teteagegee tgaegetgeg gtteatteee gtggaeegeg aggaeaeege gtaetegtae 240
     3862 aaggegeggt teaceetgge egtgggegae aacegegtge tggacatgge etecacetae 300
     3863 tttgacatcc geggggtgct ggaccggggt cccactttca agccctactc tggcaccgcc 360
     3864 tacaactccc tggcccccaa gggcgctccc aactcctgcg agtgggagca agaggaaact 420
     3865 caggcagttg aagaagcagc agaagaggaa gaagaagatg ctgacggtca agctgaggaa 480
     3866 gagcaagcag ctaccaaaaa gactcatgta tatgctcagg ctcccctttc tggcgaaaaa 540
     3867 attagtaaag atggtctgca aataggaacg gacgctacag ctacagaaca aaaacctatt 600
     3868 tatgcagacc ctacattcca gcccgaaccc caaatcgggg agtcacagtg gaatgaggca 660
     3869 gatgctacag tegeeggegg tagagtgeta aagaaateta eteceatgaa accatgetat 720
     3870 ggttcctatg caagacccac aaatgctaat ggaggtcagg gtgtactaac ggcaaatgcc 780
     3871 cagggacagc tagaatetea ggttgaaatg caattetttt caaettetga aaacgeeegt 840
     3872 aacgagacta acaacattca gcccaaattg gtgctgtata gtgaggatgt gcacatggag 900
     3873 accccggata cgcacctttc ttacaagccc gcaaaaagcg atgacaattc aaaaatcatg 960
     3874 ctgggtcagc agtccatgcc caacagacct aattacatcg gcttcagaga taactttatc 1020
     3875 ggcctcatgt attacaatag cactggcaac atgggagtgc ttgcaggtca ggcctctcag 1080
     3876 ttgaatgcag tggtggactt gcaagacaga aacacagaac tgtcctacca gctcttgctt 1140
     3877 gattccatgg gtgacagaac cagatacttt tccatgtgga atcaggcagt ggacagttat 1200
     3878 gacccagatg ttagaattat tgaaaatcat ggaactgaag acgagctccc caactattgt 1260
     3879 ttccctctgg gtggcatagg ggtaactgac acttaccagg ctgttaaaac caacaatggc 1320
     3880 aataacgggg gccaggtgac ttggacaaaa gatgaaactt ttgcagatcg caatgaaata 1380
     3881 ggggtgggaa acaatttcgc tatggagata aacctcagtg ccaacctgtg gagaaacttc 1440
     3882 ctgtactcca acgtggcgct gtacctacca gacaagctta agtacaaccc ctccaatgtg 1500
    3883 qacatctctq acaaccccaa cacctacgat tacatgaaca agcgagtggt ggccccgggg 1560
     3884 ctqqtqqact qctacatcaa cctgggcgcq cqctggtcgc tggactacat ggacaacgtc 1620
     3885 aacccettea accaccaccg caatgeggge etgegetace getecatget eetgggeaac 1680
    3886 gggcgctacg tgcccttcca catccaggtg ccccagaagt tctttgccat caagaacctc 1740
    3887 ctcctcctgc cgggctccta cacctacgag tggaacttca ggaaggatgt caacatggtc 1800
    3888 ctccagaget ctctgggtaa cgateteagg gtggaegggg ceageateaa gttegagage 1860
    3889 atctgcctct acgccacctt cttccccatg gcccacaaca cggcctccac gctcgaggcc 1920
    3890 atgctcagga acgacaccaa cgaccagtcc ttcaatgact acctctccgc cgccaacatg 1980
    3891 ctctacccca tacccgccaa cgccaccaac gtccccatct ccatcccctc gcgcaactgg 2040
    3892 geggeettee geggetggge etteaceege etcaagacea aggagaceee etceetggge 2100
    3893 tegggatteg acceetacta cacetacteg ggetecatte cetacetgga eggeacette 2160
    3894 tacctcaacc acactttcaa gaaggtctcg gtcaccttcg actcctcggt cagctggccg 2220
    3895 ggcaacgacc gtctgctcac ccccaacgag ttcgagatca agcgctcggt cgacggggag 2280
    3896 ggctacaacg tggcccagtg caacatgacc aaggactggt tcctggtcca gatgctggcc 2340
```

**RAW SEQUENCE LISTING**PATENT APPLICATION: **US/10/587,389**DATE: 08/09/2006
TIME: 10:06:36

Input Set : N:\SSLM\10587389.txt

```
3897 aactacaaca tcggctacca gggcttctac atcccagaga gctacaagga caggatgtac 2400
3898 teettettea qqaaetteea qeecatqaqe eqqeaqqtqq tqqaecaqae caagtacaag 2460
3899 gactaccagg aggtgggcat catccaccag cacaacaact cgggcttcgt gggctacctc 2520
3900 gececcacca tgegegaggg acaggeetac ceegecaact teccetatec geteatagge 2580
3901 aagaccgcgg tcgacagcat cacccagaaa aagtteetet gegaccgcac cetetggege 2640
3902 atccccttct ccagcaactt catgtccatg ggtgcgctct cggacctggg ccagaacttg 2700
3903 ctctacgcca actccgccca cgccctcgac atgaccttcg aggtcgaccc catggacgag 2760
3904 cccaccette tetatgttet gttegaagte tttgaegtgg teegggteea eeageegeae 2820
3905 cgcggcgtca tcgagaccgt gtacctgcgt acgcccttct cggccggcaa cgccaccacc 2880
3906 taa
10532 <210> SEQ ID NO: 125
10533 <211> LENGTH: 933
10535 <213> ORGANISM: Chimpanzee Adenovirus- CV68 Hexon plp. 10537 <400> SECUENCE: 135
10534 <212> TYPE: PRT
10537 <400> SEQUENCE: 125
10538 Met Ala Thr Pro Ser Met Leu Pro Gln Trp Ala Tyr Met His Ile Ala
                      5
10539 1
10540 Gly Gln Asp Ala Ser Glu Tyr Leu Ser Pro Gly Leu Val Gln Phe Ala
10542 Arg Ala Thr Asp Thr Tyr Phe Ser Leu Gly Asn Lys Phe Arg Asn Pro
10543 35
                                  40
10544 Thr Val Ala Pro Thr His Asp Val Thr Thr Asp Arg Ser Gln Arg Leu
10546 Thr Leu Arg Phe Val Pro Val Asp Arg Glu Asp Asn Thr Tyr Ser Tyr
10548 Lys Val Arg Tyr Thr Leu Ala Val Gly Asp Asn Arg Val Leu Asp Met
10550 Ala Ser Thr Tyr Phe Asp Ile Arg Gly Val Leu Asp Arg Gly Pro Ser
                 100
                                      105
10552 Phe Lys Pro Tyr Ser Gly Thr Ala Tyr Asn Ser Leu Ala Pro Lys Gly
                                 120
10554 Ala Pro Asn Thr Cys Gln Trp Thr Tyr Lys Ala Asp Gly Glu Thr Ala
                              135
         130
10556 Thr Glu Lys Thr Tyr Thr Tyr Gly Asn Ala Pro Val Gln Gly Ile Asn
10557 145
                         150
10558 Ile Thr Lys Asp Gly Ile Gln Leu Gly Thr Asp Thr Asp Gln Pro
                     165
                                          170
10560 Ile Tyr Ala Asp Lys Thr Tyr Gln Pro Glu Pro Gln Val Gly Asp Ala
                 180
                                      185
10562 Glu Trp His Asp Ile Thr Gly Thr Asp Glu Lys Tyr Gly Gly Arg Ala
      195
                                  200
10564 Leu Lys Pro Asp Thr Lys Met Lys Pro Cys Tyr Gly Ser Phe Ala Lys
         210
                              215
10566 Pro Thr Asn Lys Glu Gly Gln Ala Asn Val Lys Thr Gly Thr Gly
                         230
                                              235
10568 Thr Thr Lys Glu Tyr Asp Ile Asp Met Ala Phe Phe Asp Asn Arg Ser
                                          250
                     245
10570 Ala Ala Ala Ala Gly Leu Ala Pro Glu Ile Val Leu Tyr Thr Glu Asn
```

Input Set : N:\SSLM\10587389.txt

10572 10573		Asp	Leu 275	Glu	Thr	Pro	Asp	Thr 280	His	Ile	Val	Tyr	Lys 285	Ala	Gly	Thr
10574 10575	_	Asp 290	Ser	Ser	Ser	Ser	Ile 295	Asn	Leu	Gly	Gln	Gln 300	Ala	Met	Pro	Asn
10576 10577	_	Pro	Asn	Tyr	Ile	Gly 310	Phe	Arg	Asp	Asn	Phe 315	Ile	Gly	Leu	Met	Tyr 320
10578 10579	Tyr	Asn	Ser	Thr	Gly 325	Asn	Met	Gly	Val	Leu 330	Ala	Gly	Gln	Ala	Ser 335	Gln
10580 10581	Leu	Asn	Ala	Val 340	Val	Asp	Leu	Gln	Asp 345	Arg	Asn	Thr	Glu	Leu 350	Ser	Tyr
10582 10583		Leu	Leu 355	Leu	Asp	Ser	Leu	Gly 360	Asp	Arg	Thr	Arg	Tyr 365	Phe	Ser	Met
10584 10585	Trp	Asn 370		Ala	Val	Asp	Ser 375	Tyr	Asp	Pro	Asp	Val 380	Arg	Ile	Ile	Glu
10586 10587	Asn		Gly	Val	Glu	Asp 390		Leu	Pro	Asn	Tyr 395		Phe	Pro	Leu	Asp 400
10588 10589		Val	Gly	Arg	Thr 405		Thr	Tyr	Gln	Gly 410		ГÀè	Ala	Asn	Gly 415	
10590 10591	_	Gln	Thr	Thr 420		Thr	Lys	Asp	Asp		Val	Asn	Asp	Ala 430		Glu
10592 10593		Gly	Lys 435		Asn	Pro	Phe	Ala 440		Glu	Ile	Asn	Ile 445		Ala	Asn
10594 10595	Leu	Trp	Arg	Asn	Phe	Leu	Tyr 455		Asn	Val	Ala	Leu 460	Tyr	Leu	Pro	Asp
10596 10597		Tyr	Lys	Tyr	Thr	Pro 470	Ala	Asn	Val	Thr	Leu 475	Pro	Thr	Asn	Thr	Asn 480
10598 10599	Thr	Tyr	Asp	Tyr	Met 485	Asn	Gly	Arg	Val	Val 490	Ala	Pro	Ser	Leu	Val 495	Asp
10600 10601	Ser	Tyr	Ile	Asn 500	Ile	Gly	Ala	Arg	Trp 505	Ser	Leu	Asp	Pro	Met 510	Asp	Asn
10602 10603		Asn	Pro 515		Asn	His	His	Arg 520	Asn	Ala	Gly	Leu	Arg 525	Tyr	Arg	Ser
10604 10605		Leu 530	Leu	Gly	Asn	Gly	Arg 535	Tyr	Val	Pro	Phe	His 540	Ile	Gln	Val	Pro
10606 10607		_	Phe	Phe	Ala	Ile 550	Lys	Ser	Leu	Leu	Leu 555	Leu	Pro	Gly	Ser	Tyr 560
10608 10609			Glu	Trp	Asn 565	Phe	Arg	Lys	Asp	Val 570	Asn	Met	Ile	Leu	Gln 575	Ser
10610 10611			Gly		_		Arg		_	_				Ser 590	Phe	Thr
10612 10613		Ile	Asn 595											Asn	Thr	Ala
10614 10615	Ser	Thr 610		Glu	Ala	Met	Leu 615		Asn	Asp	Thr	Asn 620		Gln	Ser	Phe
10616 10617		Asp	Tyr	Leu	Ser	Ala 630		Asn	Met	Leu	Tyr 635	Pro	Ile	Pro	Ala	Asn 640
10618 10619		Thr	Asn	Val	Pro 645		Ser	Ile	Pro	Ser 650		Asn	Trp	Ala	Ala 655	
10620	Arg	Gly	Trp	Ser		Thr	Arg	Leu	Lys		Lys	Glu	Thr	Pro		Leu

Input Set : N:\SSLM\10587389.txt

Output Set: N:\CRF4\08092006\J587389.raw

	10621				660					665					670		
	10622	Gly	Ser	Gly	Phe	Asp	Pro	Tyr	Phe	Val	Tyr	Ser	Gly	Ser	Ile	Pro	Tyr
	10623	•		675		-		•	680		•		-	685			-
	10624	Leu	Asp	Gly	Thr	Phe	Tyr	Leu	Asn	His	Thr	Phe	Lys	Lys	Val	Ser	Ile
	10625		690	_			_	695					700	_			
	10626	Thr	Phe	Asp	Ser	Ser	Val	Ser	Trp	Pro	Gly	Asn	Asp	Arg	Leu	Leu	Thr
	10627	705					710					715					720
	10628	Pro	Asn	Glu	Phe	Glu	Ile	Lys	Arg	Thr	Val	Asp	Gly	Glu	Gly	Tyr	Asn
	10629					725					730					735	
	10630	Val	Ala	Gln	Cys	Asn	Met	Thr	Lys	Asp	Trp	Phe	Leu	Val	Gln	Met	Leu
	10631				740					745					750		
	10632	Ala	His	_	Asn	Ile	Gly	Tyr		${ t Gly}$	Phe	Tyr	Val		Glu	Gly	Tyr
	10633			755					760					765			
	10634	Lys		Arg	Met	Tyr	Ser		Phe	Arg	Asn	Phe		Pro	Met	Ser	Arg
	10635		770					775					780				
	10636		Val	Val	Asp	Glu		Asn	Tyr	Lys	Asp	_	Gln	Ala	Val	Thr	
	10637					_	790	_				795	_	_		_	800
	10638	Ala	Tyr	Gln	His		Asn	Ser	Gly	Phe	_	Gly	Tyr	Leu	Ala		Thr
_	10639		_			805	_	_	_		2±0	_	_	_	_	815	
E>	10640	Met	Arg	Gin		Gin	Pro	Tyr	Pro	<b>A1a</b> 825	Kaa	Tyr	Pro	Tyr		Leu	TIE
	10641	a1	T		820	**- 1	mla sa	0	17- 7		αl	T	T	Dh.	830	O	7
	10642 10643	GIY	гуѕ	835	Ala	val	1111	ser	840	1111	GIII	гуѕ	гуѕ	845	ьец	Cys	Asp
	10643	Δra	17 = 1		d, s.s.	Δνα	т1ь	Dro		Sar	Sar	Δan	Dhe		Ser	Met	Glv
	10645	n. g	850	rice	115	nr 9	110	855	1110	DCI	DCL	71511	860	1100	DCI	rice	Cry
	10646	Ala		Thr	Asp	Len	Glv		Asn	Met.	Leu	Tvr		Asn	Ser	Ala	His
	10647						870					875					880
	10648	Ala	Leu	Asp	Met	Asn	Phe	Glu	Val	Asp	Pro	Met	Asp	Glu	Ser	Thr	Leu
	10649			_		885				_	890		_			895	
	10650	Leu	Tyr	Val	Val	Phe	Glu	Val	Phe	Asp	Val	Val	Arg	Val	His	Gln	Pro
	10651				900					905					910		
E>	10652	His	Arg	Gly	Val	Ile	Glu	Ala	Val	Tyr	Xaa	Arg	Thr	Pro	Phe	Ser	Ala
	10653			915					920	,		,		925			
	10654	Gly		Ala	Thr	Thr	,										
	10655		930	,	· N/												
E>	10658	- 1	- )	n (	1.1	)											
	`			لعلر			-										

see p. 18

VARIABLE LOCATION SUMMARY

DATE: 08/09/2006

PATENT APPLICATION: US/10/587,389

TIME: 10:06:38

Input Set : N:\SSLM\10587389.txt

Output Set: N:\CRF4\08092006\J587389.raw

1

eno eplanation Use of n's or Xaa's (NEW RULES):

, 1) b

Use of n's and/or Xaa's have been detected in the Sequence Listing. Use of <220> to <223> is MANDATORY if n's or Xaa's are present. in <220> to <223> section, please explain location of n or Xaa, and which

residue n or Xaa represents.

Seq#:3; N Pos. 3592,7705,11272,11275,15203,24396,27010,28655,30744,31045

Seq#:24; N Pos. 63 / // Seq#:125; Xaa Pos. 826,922 VERIFICATION SUMMARYDATE: 08/09/2006PATENT APPLICATION: US/10/587,389TIME: 10:06:38

Input Set : N:\SSLM\10587389.txt

Output Set: N:\CRF4\08092006\J587389.raw

L:16 M:270 C: Current Application Number differs, Replaced Current Application No L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:1359 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:3 M:340 Repeated in SeqNo=3 L:3859 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:24 L:10640 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:125

M:340 Repeated in SeqNo=125

L:10658 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:125